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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/679,341	10/04/2000	Akio Nakashima	2165.8	6755

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EXAMINER

SUHOL, DMITRY

ART UNIT PAPER NUMBER

3712

DATE MAILED: 12/01/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/679,341

Applicant(s)

NAKASHIMA ET AL.

Examiner

Dmitry Suhol

Art Unit

3712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-25 is/are pending in the application.
- 4a) Of the above claim(s) 12-18 and 23-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-11 and 19-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-11 and 19-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7 of U.S. Patent No. 6,416,853 in view of Lee, Lenkoff, Wakai and Green et al. The patented and pending claims set forth the same invention of substantially the same scope except the invention of patented claims 1-7 lacks the specifics of a writing member and a container for refilling a writing member as well as specific properties of a water-metachromatic cloth and resin. However the specifics of such a writing member for a water-metachromatic sheet is well known in the art and shown by Lee (32) and Lenkoff (fig. 2). A container member for refilling a writing member is also well known in the art and is shown by Wakai (figure 1). Green adds the teaching of a support surface which is

Art Unit: 3712

water-impermeable and made of a material selected from a soft thermoplastic resin and a thermoplastic elastomer in a drawing toy device.

In view of Lee and Lenkoff it would have been obvious to one of ordinary skill in the art to incorporate the specifics of a writing member and container for refilling a writing member in the water-metachromatic toy of claims 1-7. The ranges for the densities of the cloth silicic acid along with the exact amounts of silicic acid per weight would have been obvious for the purpose of providing luster to the water-metachromatic mark especially since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 22, there is no antecedent basis for "said gap forming means".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Takahara (Japanese Publication number 02-074688) and Green et al '525. Lee discloses some of the elements of the claims including, a water-metachromatic sheet (24) with a porous layer comprising a binder resin and silicic acid (abstract) as required by claim 1, a colored layer being a lower or an upper layer being in a vicinity of a porous layer as required by claim 3 (col. 2, lines 21-26), a sheet material being provided on a back of a water-metachromatic sheet as required by claim 1 (cols. 2-3, lines 67-68 and 1-2 respectively) is read onto the hard surface of a frame. Lee further teaches that his invention is made of 0.18 mm paper and 0.03 mm coating of silica and resin (col. 2, lines 41-48). The writing means as required by claim 7 is shown in (figs. 1-6). A water providing means as required by claim 8 are shown in figures 2-3 and 6 and described in column 3, lines 3-32.

Although Lee discloses some of the elements of the claims the reference fails to explicitly teach a water-metachromatic sheet being cloth and having a density of 30 g/m² to 1000 g/m² and 1 g/m² to 30 g/m² of silicic acid in a porous layer along with amount of silicic acid being ranging from 0.5 to 2 parts by weight per 1 part by weight of the binder as required by claim 1, silicic acid having a particle diameter of 0.03 µm to 10 µm with a resin being a polyurethane resin as required by claim 2, a sheet material provided on a back of a cloth being water-impermeable as required by claim 4.

However, Takahara discloses a water-metachromatic sheet which teaches the use of a

Art Unit: 3712

cloth substrate (abstract) with a silica particle diameter of 0.03 μm to 10 μm (abstract).

Therefore it would have been obvious to one having ordinary skill in the art, at the time of the claimed invention to use a cloth substrate and silica particles having a diameter of 0.03 μm to 10 μm , as taught by Takahara, for the purpose of interest to the consumer by providing a variety of substrates usable in everyday life, such as a canvas. It would have been further obvious to use a polyurethane resin since the use of such resins are well known in the water-metachromic arts. The ranges for the densities of the cloth silicic acid along with the exact amounts of silicic acid per weight would have been obvious for the purpose of providing luster to the water-metachromatic mark especially since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Regarding claims 1 and 5-6, although Lee teaches a sheet material being provided on a back of a water-metachromatic sheet, as stated above, the reference fails to explicitly teach that the sheet is water-impermeable as required by claim 1, is made of a material selected from a soft thermoplastic resin and a thermoplastic elastomer with a thickness of 1 μm to 3mm as required by claim 5 and a cloth being a quadrilateral having a side of 50cm or longer as required by claim 6. However, Green discloses a kit for making artistic articles, which teaches a water-impermeable backing sheet made of a material selected from a soft thermoplastic resin and a thermoplastic elastomer (fig. 1, and col. 5, lines 47+) having a thickness in the range of 1 μm to 3mm (col. 6, lines 46-47). Therefore it would have been obvious, in view of Green, to provide the device of

Art Unit: 3712

Lee, as modified by Takahara, with a backing sheet having the above properties for the purpose of providing an inexpensive, simple in design, sturdy, fun, safe, portable and not messy drawing toy (see Green, col. 3, lines 3-5). It would have been further obvious to make the sheet of Lee, as modified by Takahara, 50cm or longer since write/drawing boards with such a size are well known in the art.

Claims 9 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee and Takahara (Japanese Publication number 02-074688), as stated above, in view of Lenkoff. Lee as modified by Takahara discloses most of the elements of the claims, as stated above, including a means for providing water having hollow main body (fig. 1, element 32) as required by claims 9 and 19, a pen point member formed of a fibrous worked member (col. 3, lines 29-30) read onto a felt tip as required by claim 9, means for communicating air (fig. 1, element 34 and col. 3, lines 6-8) as required by claim 9.

However Lee, as modified by Takahara, lacks a water absorber held in a hollow interior of a main body as required by claim 9 and a communication hole formed through the tip end portion of the main body at a position forward of the tip end of the water absorber as required by claim 20. Lenkoff discloses a means for providing water like that of Lee which teaches a water absorber held in a hollow interior of a main body (figure 1 and col. 1, lines 12-22). Therefore it would have been obvious to provide the water pen of Lee with a water absorber held in a hollow interior of a main body for the purpose of better providing (metering) writing media (water) to a writable sheet. It would

have been further obvious to provide a communication hole at the forward end of the main body at a position forward of the tip end of the water absorber for the purpose of providing a communication hole to the atmosphere, since the examiner takes official notice that such construction is conventional in the art of pen making.

Claims 10-11 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee and Takahara (Japanese Publication number 02-074688), as stated above, in view of Wakai '597. Lee as modified by Takahara discloses most of the elements of the claims, as stated above, including a pen point member having a pen point at a tip end as required by claim 10 (fig. 1, element 32) where the felt tip is the pen point, however Lee lacks the specific structure of the writing instrument required by claims 10-11 and 21-22. Wakai discloses a writing instrument which teaches a cylindrical container (30) formed with an opening at the tip end thereof (35), a pen point member (10) formed of a fiber bunch (col. 2, lines 49-50) and a rod-like body (figure 2, element 10), a hollow cylindrical holder which directly holds the pen point member (elements 20 and 40), an opening at the tip end of the hollow cylindrical member (figure 1, opening of element 42) and a communication hole at the rear end (holes 22), a gap provided between an inner peripheral surface of the cylindrical holder and an outer peripheral surface of the pen point (gap 46), a connecting means (34). Therefore it would have been obvious, in view of Wakai, to manufacture the writing instrument of Lee with the structural features of Wakai for the purpose of providing a writing

Art Unit: 3712

implement that may be replenished exactly and easily with a fluid without blotting or leakage.

Claims 12-15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Lenkoff. Lee discloses a writing instrument for a water-metachromatic member, as stated above, but lacks a water absorber. As stated above, Lenkoff discloses a writing instrument like that of Lee, which teaches a water absorber (figure 1 and col. 1, lines 12-22). Therefore it would have been obvious to provide the water pen of Lee with a water absorber held in a hollow interior of a main body for the purpose of better providing (metering) writing media (water) to a writable sheet.

Supplying water to a writing instrument through a pen point, as required by claim 13, is taught by Lee in col. 3, lines 8-9. A hole and stopper in a rear of a main body of a writing member as required by claims 14-15 and 18 is described by Lee in col. 3, lines 6-8.

Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee and Lenkoff, as stated above, in view of Flye Sainte Marie et al '553. Lee, as modified by Lenkoff, discloses most of the elements of the claims, as stated above, but for a communicating hole provided at a front end of a main body as required by claim 16, a pen point having a capillary force set greater than a capillary force of a water absorber as required by claim 17. However Flye Sainte Marie discloses a writing member, like that of Lee, which teaches a communicating hole provided at a front end

Art Unit: 3712

of a main body (figure 3, near 11b). It would have been obvious to set a capillary force of a pen point to be greater than a capillary force of an absorber for the purpose of being able to provide writing fluid to the pen tip while at the same time preventing unwanted fluid leaking out, especially since such structure is known in the art.

Response to Arguments

Applicant's arguments filed 3/20/03 have been fully considered but they are not persuasive. Applicants argue that there is no motivation to combine the Green reference with the reference of Lee. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Lee clearly teaches a toy drawing apparatus having a porous sheet as a drawing surface, which is utilized in a wet environment (i.e. a water pen is used to draw upon it). Lee further teaches a solid frame as a support surface for the sheet (cols. 2-3, lines 67-68 and 1-2 respectively) and that his drawing toy is meant to be used by the young and old alike, and should be inexpensive, fun and sturdy (see Lee, col. 1, lines 23-65). Green clearly discloses a drawing toy apparatus utilized in a wet environment, which teaches that it is known to provide a water-impermeable backing sheet made of a

Art Unit: 3712

material selected from a soft thermoplastic resin and a thermoplastic elastomer (fig. 1, and col. 5, lines 47+) having a thickness in the range of 1 μ m to 3mm (col. 6, lines 46-47). Green further discloses the motivation for providing his backing sheet as the need to provide an inexpensive, simple in design, sturdy, fun, safe, portable and not messy drawing toy (see Green, col. 3, lines 3-5). Thus an artisan of ordinary skill in the art would certainly look to the teachings of Green and Lee at the time of the applicants claimed invention in order to provide a simple, fun, safe, portable and not messy toy since both Green and Lee focus upon common goals and objectives in their inventions, while Green clearly adds the element of providing a toy which is not messy.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 3712

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Suhol whose telephone number is 703-305-0085. The examiner can normally be reached on Mon - Friday 9am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on 703-308-1745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

ds

A handwritten signature in black ink, appearing to read 'Derris H. Banks', with a long horizontal line extending to the right.

DERRIS H. BANKS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700